



# State of Utah

DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

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August 28, 1991

Mr. Ken Kluksdahl  
Mine Manager  
Tenneco Minerals  
P. O. Box 2650  
St. George, Utah 84770

Dear Mr. Kluksdahl:

Re: Review of Plans to Upgrade Sedimentation Structure, Goldstrike Mine,  
M/053/005, Washington County, Utah

The Division has reviewed Tenneco's plan to upgrade the Goldstrike sedimentation pond. The Division agrees, in principle, with the design concept. However, we would like Tenneco to address some questions, regarding this design, before we proceed with approval:

1. What will be the dam elevation to which the horizontal 3 foot clay layer will be placed, 4770 ft or 4780 ft? The plan is not clear on this.
2. Plate 1 shows a "Revised Spillway". How will the spillway be revised?
3. Plate 2 shows a clay layer 4.7 feet thick. This contradicts the depth indicated in the narrative, 3 feet. What will be the actual depth?
4. What will be the final capacity (volume in acre-feet) of the sedimentation pond?
5. What will be the final discharge design capacity of the spillway?
6. What type of material will the clay be keyed into, consolidated or unconsolidated, and to what depth?

Because of the uncompacted, coarse nature of the existing dike material (waste rock), the Division suggests that a sandwich layer of finer material (sand/gravel) or



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geomembrane fabric be placed in between the original slope and the compacted clay to prevent the development of weakened zones (micro and macro pores) in the clay layer.

The Division will also forward this plan to the Division of Water Rights, Dam Safety, for their evaluation of the proposed dam design.

Please contact me if you have any questions regarding this correspondence.

Sincerely,

A handwritten signature in dark ink, appearing to read "H. Shepherd", written in a cursive style.

Holland Shepherd  
Senior Reclamation Specialist

jb  
cc: Richard Hall, Dam Safety  
Lyle Stott, DWPC  
Wayne Hedberg, DOGM  
M053005.1